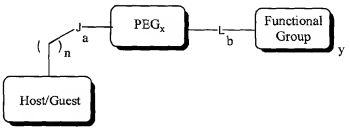
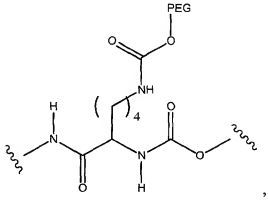
The claimed invention is:

1. A compound of the formula:



wherein

J is –NH-, -C(=O)NH-$(CH_2)_d$-, -NH-C(=O)-$(CH_2)_d$-, -CH_2SS-, -C(=O)O-$(CH_2)_e$-O-P(=O)(O-$(CH_2)_e$-Y)O-,



,

a peptide or polypeptide residue, or

-NH-(C=O)-CH(R^1)-NH-(C=O)-CH(R^1)-NH-;

Y is an additional host/guest functionality;

R^1 is -$(CH_2)_a$-CO_2H, an ester or salt thereof; or -$(CH_2)_a$-$CONH_2$;

PEG is -$O(CH_2CH_2O)_z$-, where z varies from 2 to 500;

L is H, -NH_2, -NH-(C=O)-$(CH_2)_e$-(C=O)-CH_2-, -$S(=O)_2$-HC=CH_2-, -SS-, -C(=O)O-or a carbohydrate residue;

a is 0 or 1;

b is 0 or 1;

d ranges from 0 to 6;

e ranges from 1 to 6;

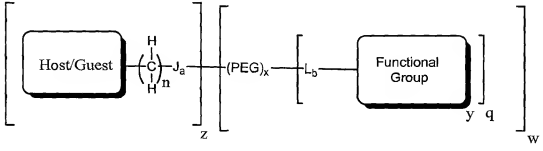
n ranges from 0 to 6;

y is 0 or 1; and

x is 0 or 1.

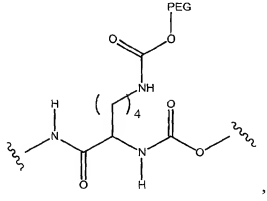
2. A compound of claim 1, wherien the host/guest is selected from the group of adamantyl, naphthyl, cholesterol, cyclodextrin, and mixtures thereof.

3. A compound of the formula:



wherein

J is –NH-, -C(=O)NH-$(CH_2)_d$-, -NH-C(=O)-$(CH_2)_d$-, -CH_2SS-, -C(=O)O-$(CH_2)_e$-O-P(=O)(O-$(CH_2)_e$-Y)O-,



,

a peptide or polypeptide residue, or

-NH-(C=O)-CH(R^1)-NH-(C=O)-CH(R^1)-NH-;

Y is an additional host/guest functionality;

R^1 is $-(CH_2)_a-CO_2H$, an ester or salt thereof; or $-(CH_2)_a-CONH_2$;

PEG is $-O(CH_2CH_2O)_z-$, where z varies from 2 to 500;

L is H, $-NH_2$, $-NH-(C=O)-(CH_2)_e-(C=O)-CH_2-$, $-S(=O)_2-HC=CH_2-$, -SS-, -C(=O)O- or a carbohydrate residue;

a is 0 or 1;

b is 0 or 1;

d ranges from 0 to 6;

e ranges from 1 to 6;

n ranges from 0 to 6;

q ranges from 1 to 5;

w ranges from 1 to 5;

y is 0 or 1;

x is 0 or 1; and

z ranges from 1 to 5.

4. A compound of claim 3, wherien the host/guest is selected from the group of adamantyl, naphthyl, cholesterol, cyclodextrin, and mixtures thereof.

5. A composition comprising a particulate composite of a cyclodextrin containing polymer and a therapeutic agent and an inclusion complex of said cyclodextrin polymer and a complexing agent comprising an inclusion guest is a compund of claim 1.

6. A composition of claim 5, wherein said therapeutic agent is selected from the group consisting of an antibiotic, a steroid, a polynucleotide, small molecule pharmaceutical, a viruse, a plasmid, a peptide, a peptide fragment, a chelating agent, a biologically active macromolecule, and mixtures thereof.

7. A composition of claim 6, wherein said therapeutic agent is a polynucleotide.

8. A composition comprising a particulate composite of a cyclodextrin containing polymer and a therapeutic agent and an inclusion complex of said cyclodextrin polymer and a complexing agent comprising an inclusion guest is a compund of claim 3.

9. A composition of claim 8, wherein said therapeutic agent is selected from the group consisting of an antibiotic, a steroid, a polynucleotide, small molecule pharmaceutical, a viruse, a plasmid, a peptide, a peptide fragment, a chelating agent, a biologically active macromolecule, and mixtures thereof.

10. A composition of claim 9, wherein said therapeutic agent is a polynucleotide.